

Claims

This listing of claims replaces all prior versions and listings of claims in the application.

1. (original) Process for the preparation of storage-stable, multiple emulsions of the water/oil/water (W/O/W) type which comprise one or more active ingredients with the steps
 - a) stirring the active ingredient into an aqueous phase,
 - b) emulsifying the aqueous phase by passing the aqueous phase through a largepored, porous membrane into an oil phase,
 - c) phase inversion of the emulsion from b), by cooling the mixture at a cooling rate of at least 0.3 K/min, where an emulsifier is added either to the aqueous phase in a) or to the oil phase in b) or to both phases.
2. (Previously Presented) Process according to Claim 1, characterized in that wherein the membrane used is a porous inorganic membrane.
3. (Previously Presented) Process according to Claim 1, wherein the pore size of the membrane used is 0.2 to 5 μm .
4. (Previously Presented) Process according to Claim 1, wherein the oil used for the oil phase is a substance chosen from the series mineral oil, white oil or vegetable oil.
5. (Previously Presented) Process according to Claim 1, wherein the emulsifier used is a nonionic emulsifier which is initially introduced in the oil phase.
6. (Currently Amended) Process according to Claim 1, wherein the emulsification in step a) is carried out at a temperature of from 30° to 35° C.
7. (Original) Process according to Claim 1, wherein the phase inversion according to step c) is carried out at a cooling rate of at least 1 K/min.

8. (Previously Presented) Process according to Claim 1, wherein the pressure difference over the membrane is $0.5 \times 10^5 \text{ Pa}$ to $25 \times 10^5 \text{ Pa}$.
9. (Previously Presented) Process according to Claim 1, wherein the process is carried out continuously in all steps.
10. (Previously Presented) Process according to Claim 1, wherein the active ingredient is a pharmaceutical active ingredient.
11. (Previously Presented) Process according to claim 10, wherein the active ingredient comprises an antigen.
12. (Previously Presented) Multiple emulsion of the W/O/W type obtainable from a process according to Claim 1.
13. (Cancelled)
14. (Currently Amended) Process of Claim 1, wherein said membrane is a ceramic membrane.
15. (Previously Presented) Process of Claim 14, wherein said ceramic membrane comprises aluminum oxide, zirconium oxide and/or titanium oxide.
16. (Previously Presented) Process of Claim 1, wherein the pore size of the membrane is 0.3 to 3 μm .
17. (Previously Presented) Process of Claim 10, wherein said active ingredient comprises an active ingredient for veterinary purposes.
18. (Previously Presented) Process of Claim 10, wherein said active ingredient comprises an antigen for vaccine formulation.
19. (Previously Presented) Process of Claim 11, wherein said antigen comprises a virus or a microorganism and said peptide chain comprises a protein or a glycoprotein.

20. (Previously Presented) Process according to Claim 10, wherein the active ingredient comprises at least one of the bacterium, a parasite, a glycoprotein which has been obtained from a microorganism, a synthetic peptide, and/or a protein or peptide which has been prepared by genetic manipulation.